

DWR Climate News Digest

March 24th - May 2nd, 2013

3-YEAR ANNIVERSARY ISSUE!!



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The information provided herein is a selected compilation of recent popular news articles, publications, and other information relevant to climate change and water management. The links provided herein are intended to provide educational and thought-provoking material for water managers and water users.

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TOPICS [Find older items in the [Climate News Archive](#)]

Reports

[The State of Adaptation in the United States: An Overview](#) [EcoAdapt - April 2013]

[Getting Climate Smart - A Water Preparedness Guide for State Action](#)

[American Rivers/NRDC - April 2013] *(By following the steps in this guide, "states can better prepare for future climate variability and better position themselves to tackle the inevitable challenges of a changing climate")*

[Sharing Water: Engaging Business](#)

[World Business Council for Sustainable Development - April 2013] *("Companies should adopt a more holistic 'watershed approach' which takes into consideration upstream and downstream interactions, and direct and indirect impacts, and recognizes the needs of the environment")*

Unburnable Carbon 2013: Wasted Capital and Stranded Assets [Carbon Tracker - April 2013]

("This new research from Carbon Tracker and the Grantham Research Institute on Climate Change and the Environment at LSE calls for regulators, governments and investor to re-evaluate energy business models against carbon budgets, to prevent \$6 trillion carbon bubble in the next decade")

Agriculture and Forestry in a Changing Climate: Adaptation Recommendations

[25 X'25 Alliance Adaptation Work Group - April 2013]

New Visions. Smart Choice. Western Water Security in a Changing Climate

[Carpe Diem West - March 2013] *(this report "spotlights successful, sustainable and economically sensible steps ten communities are taking to make sure they will have water in the decades to come)*

Addressing Climate Change Adaptation in Regional Transportation Plans

[California Department of Transportation - February 2013]

Beyond Bathtub: Modeling and Responding to Sea Level Rise and Shoreline Change

[University of Southern California Sea Grant - Urban Ocean Program] *(workshop summary report available at this website)*

Effects of Climate Variability and Change on Forest Ecosystems: A Comprehensive Synthesis for the U.S. Forest Sector [US Forest Service - December 2012]

Published Literature

NASA faked the moon landing - therefore, (climate) science is a hoax. An anatomy of the motivated rejection of science [Psychological Science - March 2013]

("Our results provide empirical support for previous suggestions that conspiratorial thinking contributes to the rejection of science. Acceptance of science, by contrast, was strongly associated with the perception of a consensus among scientists")

Sea-level Rise and other Ocean Impacts

Exploring the saltiness of the ocean to study climate change [Science Daily - April 30, 2013]

Cutting specific pollutants would slow sea level rise, research indicates

[Science Daily - April 14, 2013]

Map shows vast regions of ocean are warmer [Scientific American - April 7, 2013]

Think the planet isn't warming? Check the ocean [Discovery - April 11, 2013]

[Warming ocean threatens sea life](#) [Scientific American - April 6, 2013] (*newly compiled data by Marinexplore "not only confirms previous studies that the world's oceans are simmering, but...the heating extends beyond the first few meters of the surface waters, down to 700 meters"*)

[Clouds contributed to record Greenland ice melt](#) [Live Science - April 3, 2013]

[New comparison of ocean temperatures reveals rise over the last century](#)
[Scripps Institution of Oceanography - April 1, 2013]

[How climate change threatens the seas](#) [USA Today - March 28, 2013]

Agriculture/Food Production

[Climate change threatens wineries, study shows: how would valley adjust?](#)
[Modesto Bee - April 11, 2013]

[Study: Climate change will threaten wine production](#) [US News - April 8, 2013]

General Water Management

[Climate change and the water industry](#) [Environmental Leader - April 22, 2013]

[Watershed approach key to water resource management, report finds](#)
[Water World - April 16, 2013]

[Investor group calls for water utilities to be more open about climate risks](#)
[E&E Publishing - April 4, 2013] (*"Billions of dollars in bondholder investment in water and wastewater systems face heightened risk from changing environmental conditions, including climate change..."*)

Drought

[U.S. drought falls below 50 percent for first time in 10 months](#) [Science Daily - April 18, 2013]

Human Health Impacts

[What does climate change have to do with health care?](#) [Forbes - April 7, 2013] (*"Climate change will affect, in profoundly adverse ways, some of the most fundamental determinants of health: food, air, and water"*)

Wildlife and Ecosystem Impacts

[Climate change responsible for global vegetation change](#) [Climate Central - April 17, 2013]

[Pine bark beetles poised for new attacks on Canada's boreal forests](#)

[Scientific American - April 11, 2013]

[Odd creature evolves in a flash to survive climate change](#) [Live Science - April 8, 2013]

[Climate change winners: Adelie penguin population expands as ice fields recede](#)

[Science Daily - April 3, 2013]

Greenhouse Gas Mitigation

[How plants may help offset global warming](#) [Live Science - April 30, 2013]

[Cap-and-trade programs in California and Quebec to merge](#) [LA Times - April 22, 2013]

[Root fungus stores a surprising amount of the carbon sequestered in soil](#)

[Scientific American - March 28, 2013]

International Planning

[Greenland bets on mining as global warming hits fishing industry](#) [Bloomberg - April 17, 2013]

[Climate challenges undermine a fragile Maasai culture](#) [The Daily Climate - April 4, 2013]

["Perfect storm" of climate change and population growth brewing in African Sahel, experts](#)

[warn](#) [UC Berkeley - April 9, 2013] *(a new report warns of devastating effects including increased suffering and instability in the Sahel region; three key policies will mitigate these effects including a) invest in the well-being of girls and young women; b) invest in family planning; c) promote actions that prepare people for the impacts of climate change)*

[Climate change to worsen hunger problem in Nigeria](#) [This Day Live - April 8, 2013]

Climate Change Modeling

[New method proves - again - climate change is real](#) [Scientific American - April 10, 2013]

(historical measurements of air pressure and ocean temperatures confirm surface measurements that the climate is warming)

[Climate modelers vindicated as forecast comes true](#) [New Scientist - April 3, 2013]

[Ancient pool of warm water questions current climate models](#) [Science Daily - April 3, 2013]

[New models predict drastically greener Arctic in coming decades](#)

[Science Daily- March 31, 2013] (*"dramatic greening will accelerate climate warming at a rate greater than previously expected"*)

Legislative Updates

[Judge rules administration overlooked fracking risks in California mineral leases](#)

[Reuters - April 9, 2013]

BLOGS/Commentary

Jeff Spross on "[Global Ponzi scheme: We're taking \\$7.3 trillion a year in natural capital from our children without paying for it](#)" [Climate Progress - April 23, 2013]

Bill McKibben on "[The Fossil Fuel Resistance](#)" [Rolling Stone - April 11, 2013]

Joe Romm on "[Arctic sea ice: The death spiral continues](#)" [Climate Progress - April 11, 2013]

Luke Buckmaster on "[The beauty and horror of climate change: Interview with Chasing Ice director Jeff Orlowski](#)" [Crikey - April 9, 2013]

Andrew Freedman on "[Two key climate change concepts are 'misunderstood'](#)"

[Climate Central - March 28, 2013] (*the 'irreversibility' and the 'amount of global warming already in the pipeline' are often misunderstood by policymakers and the public*)

Dana Nuccitelli on: "[In hot water: Global warming has accelerated in past 15 years, new study of oceans confirms](#)" [Climate Progress - March 25, 2013]

Additional Items of Interest

[Greenhouse effect: CO2 concentrations set to high record high of 400 ppm](#)

[Time - May 2, 2013] (*"The last time CO2 levels were this high was likely during the Pliocene epoch, between 3.2 million and 5 million years ago"*)

[online tool] [Your Water. Your Decision.](#) (*Create a customized guide for your community to help move local policymakers from awareness to action*)

[The Keeling Curve: Current Reading = 399.5 ppm](#)

[Scripps Institution of Oceanography - April 29, 2013]

[China becoming global climate change leader, study says](#) [PhysOrg - April 28, 2013]

[Modeling climate change impacts on tidal marsh birds: restoration and conservation planning in the face of uncertainty](#) [PRBO Conservation Science - April 26, 2013]

[Guy Stewart Callendar: Global warming discovery marked](#) [BBC News - April 26, 2013]

[How resource scarcity and climate change could produce a global explosion](#)
[The Nation - April 22, 2013]

[The face and heart of climate change: Emotional intelligence unlocks human ability to care](#)
[International Business Times - April 22, 2013]

[Earth Day: Viewing climate change through a moral prism](#) [Salt Lake Tribune - April 21, 2013]

[Earth's current warmth not seen in the last 1,400 years or more, says study](#)
[Columbia University - April 21, 2013] *(More than 80 scientists from 24 nations analyzed climate data and confirmed that the Earth warmed more between 1971 and 2000 than during any other three decade interval in the last 1,400 years. "If we went into another Medieval warm Period again that extra warmth would be added on top of warming from greenhouse gases")*

[Climate change, pension funds and the big six energy companies](#) [Guardian - April 19, 2013]

[Nitrogen has key role in estimating carbon dioxide emissions from land use change](#)
[Science Daily - April 19, 2013]

[Idea of the day: How to advance infrastructure and investment in the face of climate change](#)
[Center for American Progress - April 19, 2013]

[Summer ice melt on Antarctic Peninsula is now nonlinear, fastest in over 1,000 years](#)
[Climate Progress - April 15, 2013]

[Carbon bubble will plunge the world into another financial crisis - report](#)
[Guardian - April 18, 2013]

[Winter athletes sound climate change alarm](#) [Lake Tahoe News - April 14, 2013]

[Andes' tropical glaciers going fast, may soon be gone](#) [Climate Central - April 14, 2013]

[China confirms their warming is human caused](#) [Climate Central - April 13, 2013]

[Tackling climate change is one of America's greatest opportunities of the 21st century \(and its simply the right thing to do\)](#) [Business for Innovative Climate & Energy Policy - April 2013] (*sign this climate declaration along with companies such as ebay, Nike, L'oreal, IKEA, intel, Starbucks, and more to support America's leadership role on climate change*)

[White House honors Florida scientist Jennifer Jurado for work on climate change](#)
[McClatchy - April 11, 2013]

[U.S. business leaders urge strong policy action on climate change](#) [Ceres - April 10, 2013]

[Four out of five Americans live in areas hit by recent weather disasters](#)
[Environment America - April 9, 2013]

[High-altitude ice reveals a climate on the rocks](#) [Scientific American - April 9, 2013]

[From coast to coast, community leaders press forward with climate preparedness efforts](#)
[World Wildlife Fund - April 9, 2013]

[Evolution and climate change in the NGSS](#)
[National Center for Science Education - April 9, 2013] (*the Next Generation Science Standards are based on the National Research Council's "A Framework for K-12 Science Education"*)

[The history of climate science](#) [Skeptical Science - April 7, 2013] (*two centuries of inquiry into the role of CO2 and other greenhouse gases on climate during Earth's geologic history is detailed in this thorough summary*)

[Texas provides clues of climate change impacts](#) [NBC - April 6, 2013]

[Climate change will double the area burned in U.S. wildfires by 2050, report warns](#)
[Think Progress - April 4, 2013]

[In sign of warming, 1,600 years of ice in Andes melted in 25 years](#)
[New York Times - April 4, 2013]

[Climate change may be irreversible, but we control the future trajectory](#)
[Ars Technica - April 4, 2013]

[Thin, low Arctic clouds played an important role in widespread 2012 Greenland ice sheet melt](#)
[National Science Foundation - April 3, 2013]

[Climate change: Key data points from Pew Research](#) [Pew Research Center - April 2, 2013]

[Americans back preparation for extreme weather and sea level rise](#)

[Science Daily - March 28, 2013]

[Global warming predictions prove accurate](#) [Guardian - March 27, 2013] (*forecasting data for the past 15 years shows that the planet is warming as climate models in the 1990's predicted, refuting the claim that the models are inaccurate*)

[New research confirms global warming has accelerated](#) [Skeptical Science - March 25, 2013]

[Doubling of CO2 levels in end-Triassic extinction killed off three quarters of land and sea species](#) [Climate Progress - March 24, 2013]

[Quick-change planet: Do global climate tipping points exist?](#)

[Scientific American - March 25, 2013]

[video] **[Global warming over the last 16 years](#)** [You Tube - January 2013]

[Five charts help illustrate 2012 as warmest year on record](#) [Climate Central - January 9, 2013]

[fact sheet] **[Polling the American public on climate change](#)** [Environmental and Energy Study Institute - April 2013]

Images to Ponder

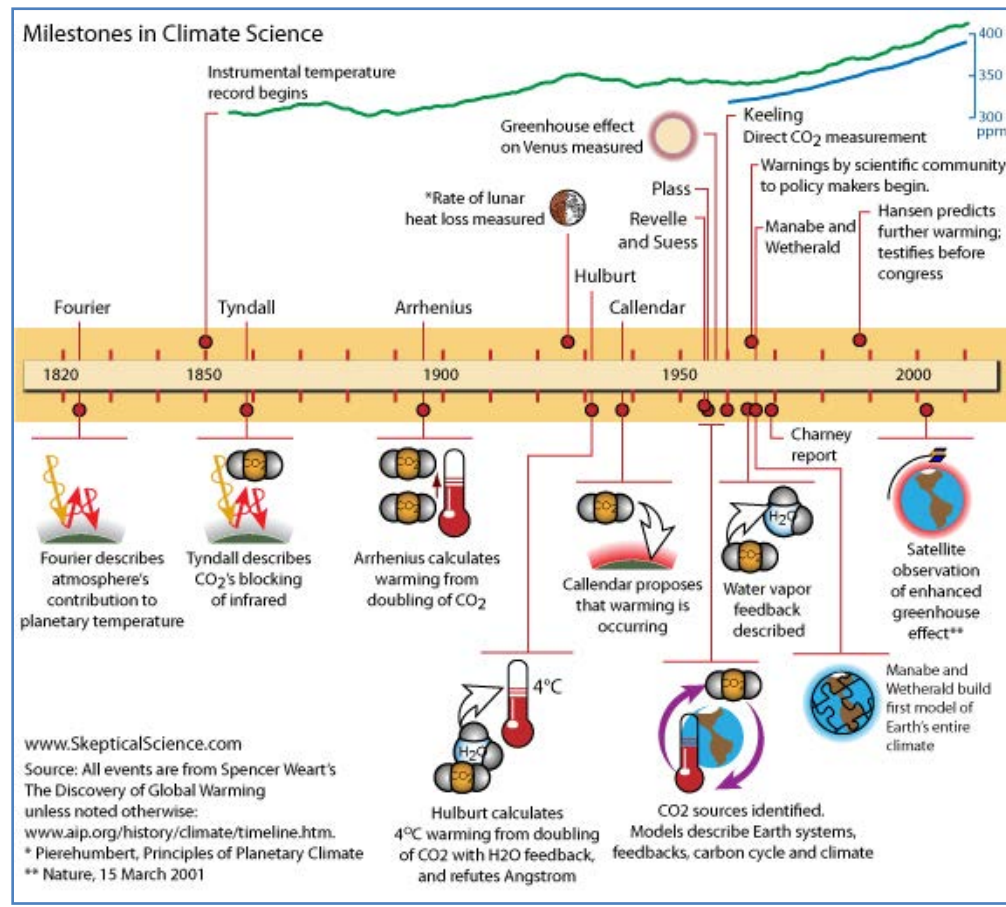
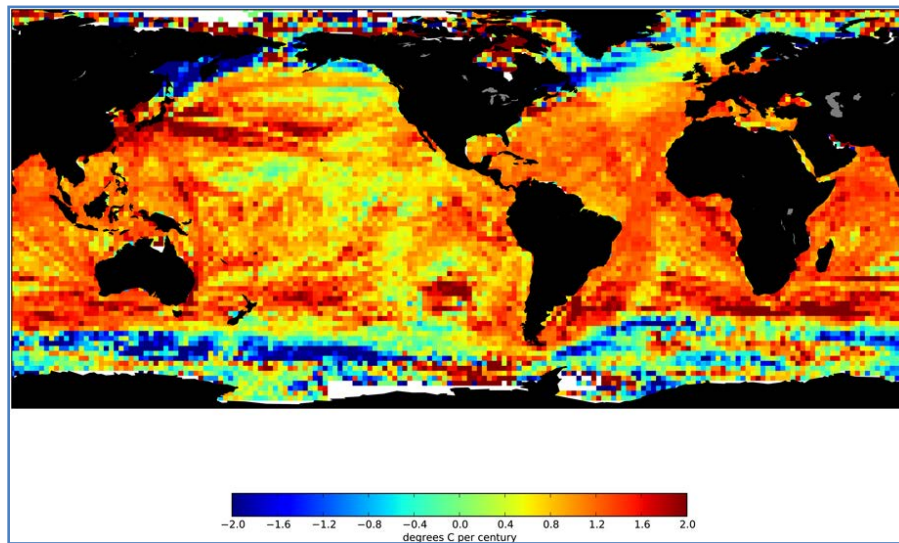


Image source: <http://www.skepticalscience.com/>



"Changes in Sea-Surface Temperature Since 1900" Image source: http://www.scientificamerican.com/article.cfm?id=graphic-science-map-shows-vast-regions-ocean-warmer&WT.mc_id=SA_DD_20130408

March 24 to May 2, 2013

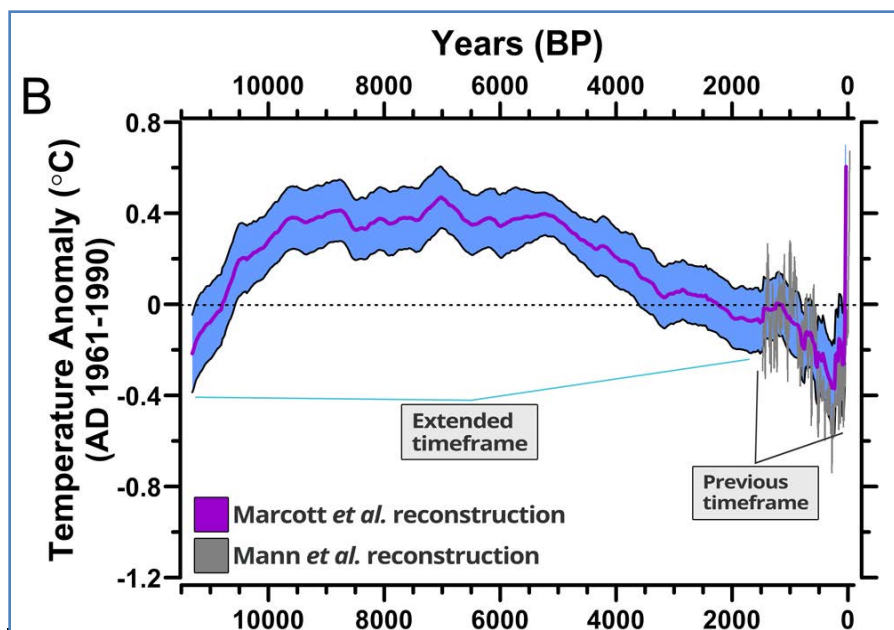


Image source: <http://climatedesk.org/wp-content/uploads/2013/03/marcott-B-1000.jpg>

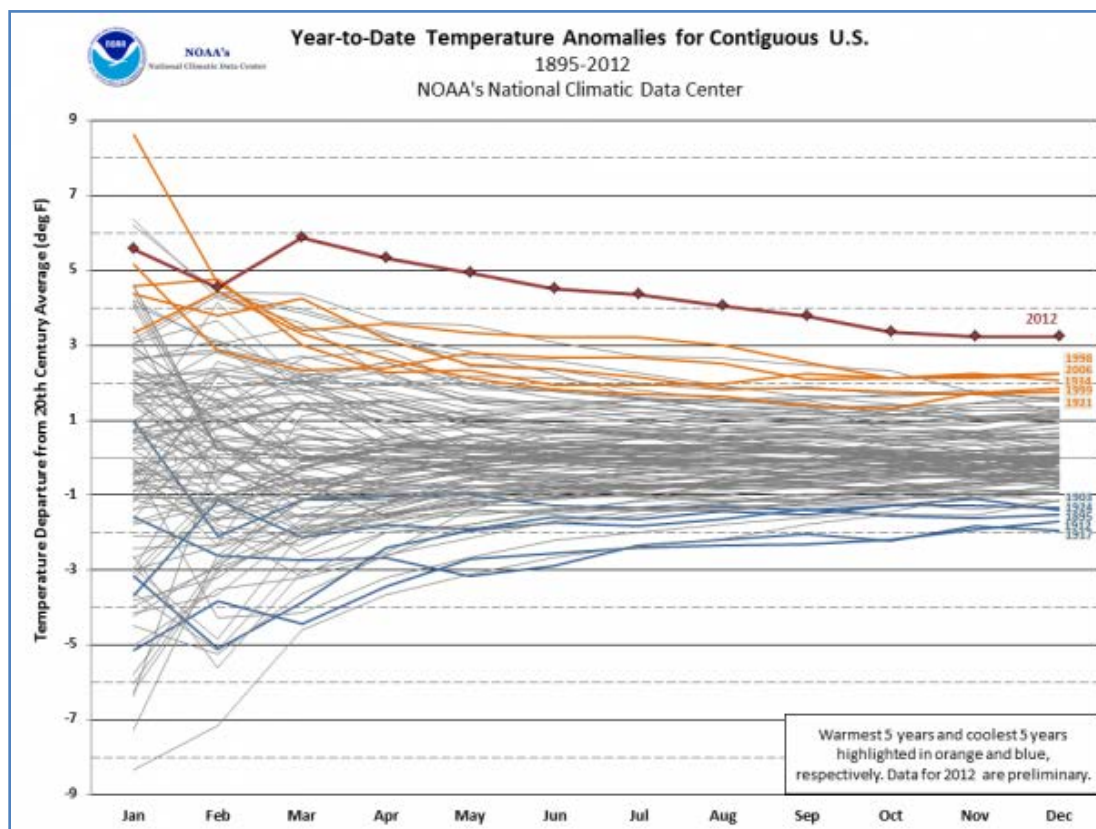


Image source: <http://www.climatecentral.org/blogs/5-charts-showing-2012-as-the-warmest-year-on-record-15439>

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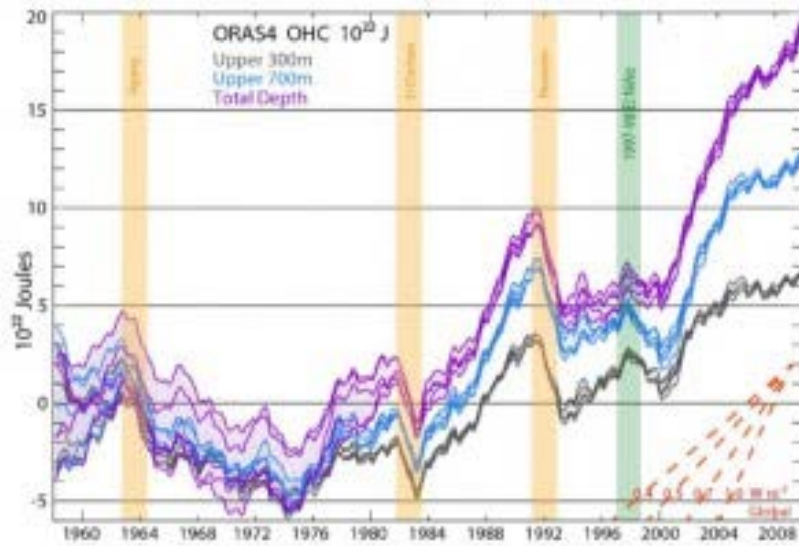
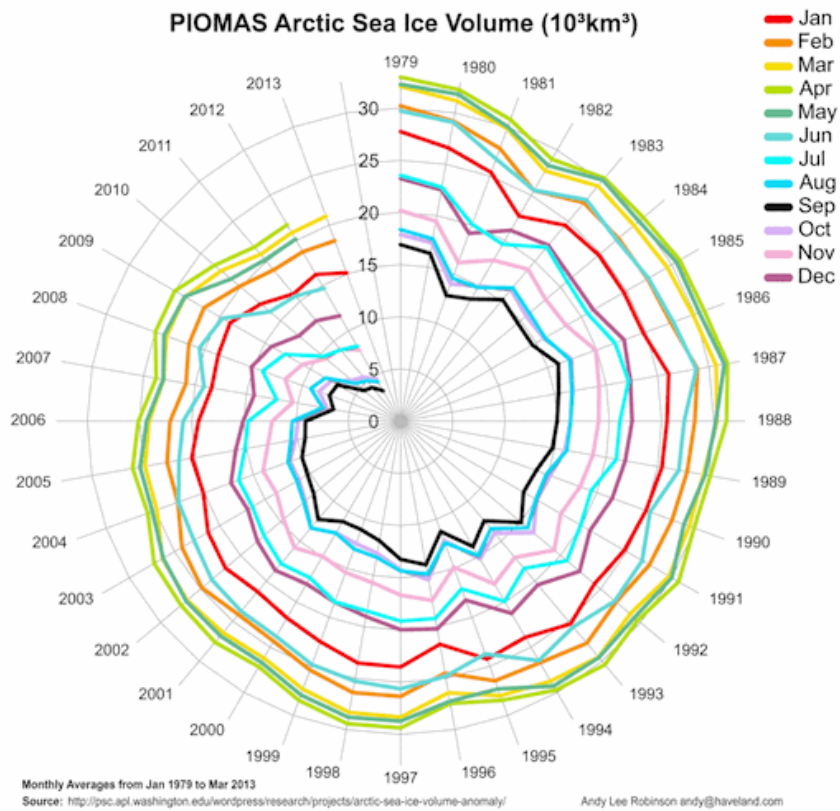


Figure 1: Ocean Heat Content from 0 to 300 meters (grey), 700 m (blue), and total depth (violet) from ORAS4, as represented by its 5 ensemble members.

Image source: <http://thinkprogress.org/climate/2013/03/25/1768601/in-hot-water-global-warming-has-accelerated-in-past-15-years-new-study-of-oceans-confirms/?mobile=nc>





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